

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A motor drive apparatus, comprising:

a first inverter-~~(14)~~ driving a first motor-~~(M1)~~;

a second inverter-~~(31)~~ driving a second motor-~~(M2)~~;

a DC power supply-~~(B)~~ outputting a DC voltage;

a voltage converter-~~(12)~~ boosting and supplying the DC voltage from said DC power supply-~~(B)~~ to said first and second inverters-~~(14, 31)~~, and down-converting and supplying the DC voltage from said first or second inverter-~~(14, 31)~~ to the side of said DC power supply ~~(B)~~;

a relay-~~(SR1, SR2)~~ connected between said DC power supply-~~(B)~~ and said voltage converter-~~(12)~~;

an electric load-~~(20)~~ connected between said relay-~~(SR1, SR2)~~ and said voltage converter-~~(12)~~; and

a control device-~~(30)~~ cutting off said relay-~~(SR1, SR2)~~ and switching control of said voltage converter-~~(12)~~ to voltage step-down control in response to detection of a fault in said DC power supply-~~(B)~~.

2. (Currently Amended) The motor drive apparatus according to claim 1, wherein said control device-~~(30)~~ controls said first and second inverters-~~(14, 31)~~ to cause a total sum of first energy at said first motor-~~(M1)~~ and second energy at said second motor-~~(M2)~~ to be zero, and cuts off said relay-~~(SR1, SR2)~~ when said electric load-~~(20)~~ and said voltage converter ~~(12)~~-are stopped.

3. (Currently Amended) The motor drive apparatus according to claim 2, wherein said control device-(30) controls said first and second inverters-(14, 31) to cause said first and second energies to be zero.

4. (Currently Amended) The motor drive apparatus according to claim 2, wherein said control device-(30) sets a duty ratio with which a primary voltage of said voltage converter (12)-corresponding to its voltage on the side of said DC power supply-(B) is not greater than an upper limit, to switch the control of said voltage converter-(12) to the voltage step-down control.

5. (Currently Amended) The motor drive apparatus according to claim 4, wherein said upper limit corresponds to a withstand voltage of parts of said electric load-(20).

6. (Currently Amended) The motor drive apparatus according to claim 4, wherein said control device-(30) sets a duty ratio with which said primary voltage falls within a range of an operating voltage of said electric load-(20), to switch the control of said voltage converter (12)-to the voltage step-down control.

7. (Currently Amended) The motor drive apparatus according to claim 2-any of claims 2-6, wherein

the range of said operating voltage has a lower limit and said upper limit, and

when said primary voltage is lower than said lower limit, said control device-(30) controls said first and second inverters-(14, 31) to cause a total sum of said first energy and said second energy to be regenerative energy.

8. (Currently Amended) The motor drive apparatus according to claim 7, wherein said electric load-(20) is a DC/DC converter-(20) that converts and supplies the DC voltage from said DC power supply-(B) to an auxiliary battery-(21).

9. (Currently Amended) A hybrid vehicle drive apparatus-(100) for driving a hybrid vehicle, comprising:

an internal combustion engine-(60);

a first motor-(M1) connected to said internal combustion engine-(60);

a second motor-(M2); and

a motor drive apparatus-(B, SR1, SR2, 11, 14, 31, 30) driving said first and second motors-(M1, M2),

said motor drive apparatus-(B, SR1, SR2, 11, 14, 31, 30) including

a first inverter-(14) driving said first motor-(M1),

a second inverter-(31) driving said second motor-(M2),

a DC power supply-(B) outputting a DC voltage,

a voltage converter-(12) boosting and supplying the DC voltage from said DC power supply-(B) to said first and second inverters-(14, 31), and down-converting and supplying the DC voltage from said first or second inverter-(14, 31) to the side of said DC power supply (B),

a relay-(SR1, SR2) connected between said DC power supply-(B) and said voltage converter-(12),

an electric load-(20) connected between said relay-(SR1, SR2) and said voltage converter-(12), and

a control device-(30) cutting off said relay-(SR1, SR2) and switching control of said voltage converter-(12) to voltage step-down control in response to detection of a fault in said DC power supply-(B),

said control device-(30) driving said first and second inverters-(14, 31) so as to drive said second motor-(M2) by electric power generated by said first motor-(M1) in accordance with a running mode of said hybrid vehicle.

10. (Currently Amended) A computer readable recording medium recorded with a program for causing a computer to perform control of a motor drive apparatus-(B, SR1, SR2, 11, 14, 31, 30) in the event of a fault in a DC power supply-(B),

said motor drive apparatus-(B, SR1, SR2, 11, 14, 31, 30) including

a first inverter-(14) driving a first motor-(M1),

a second inverter-(31) driving a second motor-(M2),

said DC power supply-(B) outputting a DC voltage,

a voltage converter-(12) boosting and supplying the DC voltage from said DC power supply-(B) to said first and second inverters-(14, 31), and down-converting and supplying the DC voltage from said first or second inverter-(14, 31) to the side of said DC power supply (B),

a relay-(SR1, SR2) connected between said DC power supply-(B) and said voltage converter-(12), and

an electric load-(20) connected between said relay-(SR1, SR2) and said voltage converter-(12),

said program causing the computer to perform

a first step of detecting a fault in said DC power supply-(B),

a second step of cutting off said relay ~~(SR1, SR2)~~ in response to detection of the fault in said DC power supply ~~(B)~~, and

a third step of switching control of said voltage converter ~~(12)~~ to voltage step-down control in response to cutting off of said relay ~~(SR1, SR2)~~.

11. (Currently Amended) The computer readable recording medium recorded with a program for causing a computer to perform control according to claim 10, wherein

said second step includes

a first sub-step of controlling said first and second inverters ~~(14, 31)~~ to cause a total sum of first energy at said first motor (M1) and second energy at said second motor ~~(M2)~~ to be zero,

a second sub-step of stopping said voltage converter ~~(12)~~,

a third sub-step of stopping said electric load ~~(20)~~, and

a fourth sub-step of cutting off said relay ~~(SR1, SR2)~~ after completion of said first, second and third sub-steps.

12. (Original) The computer readable recording medium recorded with a program for causing a computer to perform control according to claim 11, wherein said first sub-step causes said first and second energies to be zero.

13. (Currently Amended) The computer readable recording medium recorded with a program for causing a computer to perform control according to claim 10 ~~any of claims 10-12~~, wherein

said third step includes

a fifth sub-step of calculating a duty ratio for setting a primary voltage of said voltage converter-(12) corresponding to its voltage on the side of said DC power supply-(B) to not greater than an upper limit, and

a sixth sub-step of controlling said voltage converter-(12) based on said calculated duty ratio.

14. (Currently Amended) The computer readable recording medium recorded with a program for causing a computer to perform control according to claim 13, wherein said fifth sub-step calculates the duty ratio with which said primary voltage falls within a range of an operating voltage of said electric load-(20).

15. (Currently Amended) The computer readable recording medium recorded with a program for causing a computer to perform control according to claim 13, wherein the range of said operating voltage has a lower limit and said upper limit, and said third step further includes

a seventh sub-step of determining whether said primary voltage is not greater than said lower limit, and

an eighth sub-step of controlling said first and second inverters-(14, 31) to cause a total sum of said first and second energies to be regenerative energy when said primary voltage is not greater than said lower limit.